

Claims

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. An adjustable position retaining/mounting aperture for plastic parts comprising:
 - an elongated slot having a first wall;
 - a pair of flexible retaining arms each having a first wall with a plurality of depressions and ridges therein, the first walls of the retaining arms forming a second wall of the elongated slot; and,
 - a spring adjacent to the retaining arms, the spring being deflected when a retaining arm is deflected from a normal position and the spring supplying a spring force to urge the retaining arm to return to the normal position;wherein a fastener inserted in the elongated slot is retained in one of the depressions by at least one of the retaining arms and when the fastener is moved at least one of the retaining arms is deflected to allow the fastener to ride over one of the ridges and into an adjacent depression.
2. An adjustable position retaining/mounting aperture for plastic parts as described in claim 1 wherein:
 - a diameter defined by each depression and the first wall of the elongated slot when the retaining arms are in the normal position corresponds closely to a diameter of the fastener.
3. An adjustable position retaining/mounting aperture for plastic parts as described in claim 1 wherein:
 - the spring comprises a thin strip of material in the general shape of an arch, a portion of the arch being adjacent to each of the retaining arms.
4. An adjustable position retaining/mounting aperture for plastic parts as

described in claim 1 wherein:

the retaining arms each comprise a relatively narrow neck portion and a relatively wide main body portion, a first wall of the main body portion being defined by the ridges and depressions, the narrow neck portion being flexible so as to act as a living hinge for the main body portion.

5. An adjustable position retaining/mounting aperture for plastic parts as described in claim 4 wherein:

the retaining arm flexes at the narrow neck portion when the fastener is displaced so that the fastener rides up one of the ridges thereby deflecting the main body portion of the retaining arm into contact with the spring.

6. An adjustable position retaining/mounting aperture for plastic parts as described in claim 1 wherein:

the aperture is provided in a first plastic part and the fastener is also secured to a second part whereby a range of adjustment is provided between the first part and the second part.

7. An adjustable position retaining/mounting aperture for plastic parts as described in claim 6 wherein:

a lengthwise dimension of the elongated slot is equal to a desired total range of adjustment between the first part and the second part.

8. An adjustable position retaining/mounting aperture for plastic parts as described in claim 6 wherein:

a temporary application of force to one of the first part or the second part is sufficient to displace the fastener into an adjacent depression and the retaining arm and spring act together to maintain the fastener in the depression until such time that force is again applied to displace the fastener into the next adjacent depression, whereby adjustment is made between the first part and the second part without removal of the fastener.

9. A retaining device for providing a range of adjustment between a first part and a second part, the device comprising:

an aperture provided in the first part, the aperture including an elongated slot defined by a first wall and at least one retaining member, the retaining member having a plurality of depressions and ridges, the depressions and ridges defining a second wall of the elongated slot, the retaining member being flexible so as to be displaceable from a normal position;

a resilient member provided in the aperture adjacent to the retaining member to urge the retaining member toward the normal position; and,

a fastener disposed in the elongated slot, the fastener being secured to the second part;

wherein a temporary application of force to one of the first or second parts is sufficient to cause the fastener to ride up one of the ridges thereby deflecting the at least one retaining member into contact with the resilient member until the fastener is seated in an adjacent depression and the fastener is retained in the depression by the retaining member and resilient member until force is again applied to one of the first or second parts to cause the fastener to move to the next adjacent depression.

10. A retaining device for providing a range of adjustment between a first part and a second part, as described in claim 9 wherein a diameter defined by each of the depressions and the first wall of the elongated slot when the retaining member is in a normal position closely corresponds to a diameter of the fastener.

11. A retaining device for providing a range of adjustment between a first part and a second part, as described in claim 9 wherein a lengthwise dimension of the elongated slot is equal to a desired total range of adjustment between the first part and the second part.